

Math in Focus[®]

Singapore Math[®] by Marshall Cavendish[®]



GRADES
K–8

**Global Design.
Elevated Learning.
Proven Achievement.**

Foster the Mathematicians of Tomorrow

After more than a decade of resounding success in U.S. classrooms, *Math in Focus*® is now part of the HMH® connected teaching and learning experience. *Math in Focus* © 2020 combines authentic Singapore Math® pedagogy with data-driven instruction, digital assessment, and on-demand professional learning, all on one seamless and streamlined system.

Research-Based Pedagogy

- A pedagogy proven to facilitate mastery, built on the authentic Singapore Math® Framework
- An increased emphasis on metacognition and attitudes toward learning, in line with global best practices
- Consistent use of manipulatives via the Concrete-Pictorial-Abstract approach, with powerful visual models including the bar model

Connected Teaching and Learning

- With *Ed*, the HMH learning platform, you'll have access to *Math in Focus* instruction, supplemental support, professional learning, and assessment, all in a single place with a single login.
- Progress monitoring, includes the *HMH Math Growth Measure*, with actionable data, automated grouping, and reporting tools.
- Family Room provides on-demand resources that make at-home learning more manageable for families and caregivers.
- *HMH Go*™ connects students and teachers to *Math in Focus* content and instructional resources online, offline, or on the go.

Powerful Professional Learning

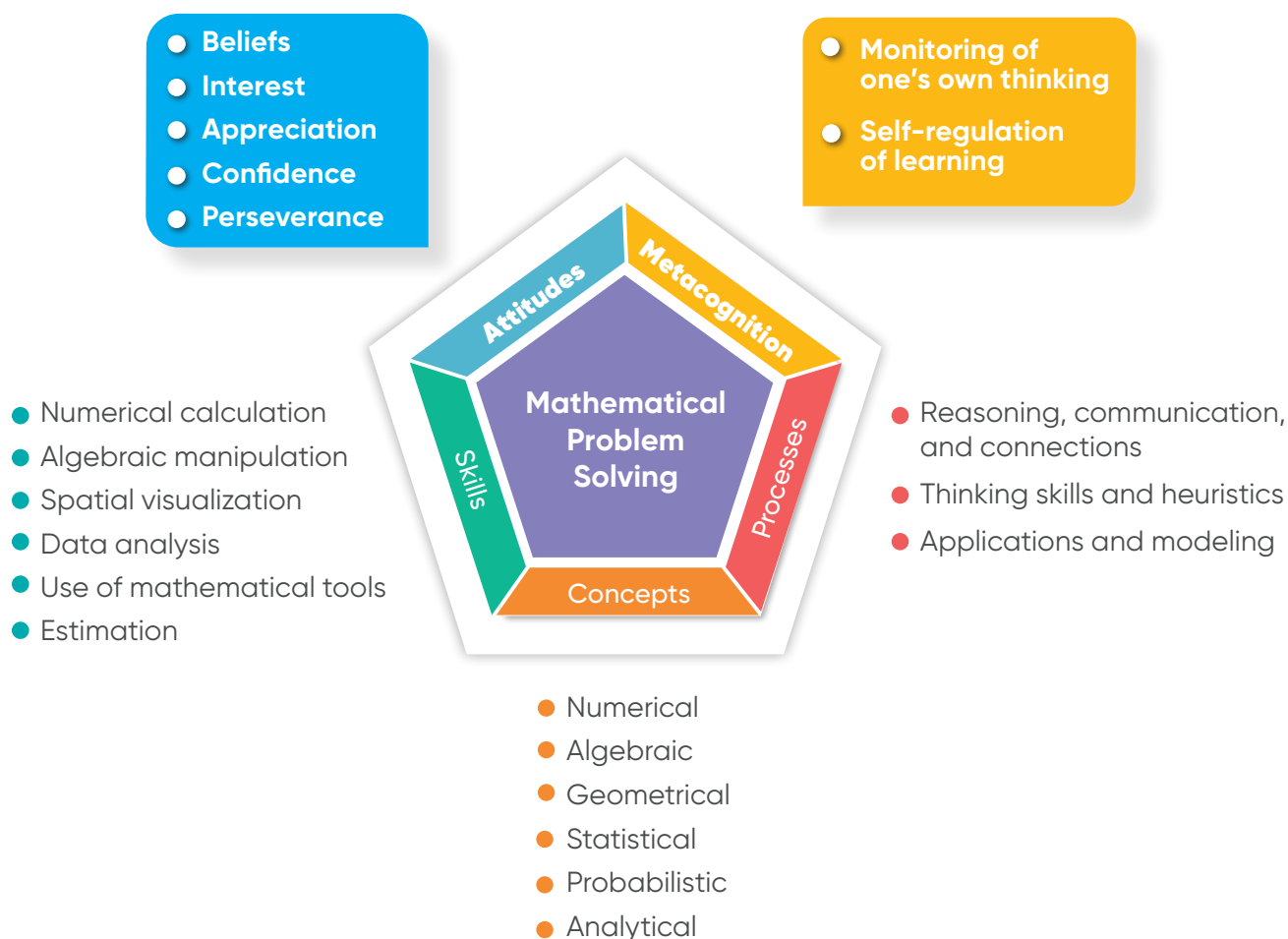
- Embedded instructional support in the Teacher's Edition and in the Professional Learning Guide
- Teacher's Corner™, with access to on-demand professional learning and teaching support via *Ed*, the HMH learning platform
- The only Singapore Math® program to receive an independent ESSA rating of "Strong," which specifically noted the "distinctive amount and quality of professional learning teachers receive"



The Power of the Singapore Math[®] Framework

At the heart of *Math in Focus* is the authentic Singapore Math[®] Framework. An elite team of math educators and experts studied global best practices to create this powerful framework that works in any classroom, for any student. With this framework at its core, the instruction in the 2020 edition includes an increased emphasis on **attitudes to learning** and **metacognition**, found in the Math Talk, Math Sharing, and Math Journal opportunities and throughout the teacher-facilitated discussion.

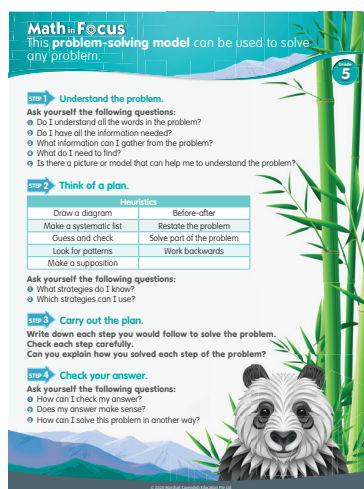
Singapore Math[®] Framework



Mathematicians Are Problem Solvers First

Research shows that problem solving is central to mathematical learning. In *Math in Focus*, students learn **for**, **about**, and **through** problem solving in order to master concepts fully and apply them to non-routine, open-ended, and real-world problems.

	Teaching for Problem Solving	Teaching about Problem Solving	Teaching through Problem Solving
Purpose	Emphasizes learning mathematics in order to apply it to solve problems	Emphasizes processes, strategies, and metacognition	Emphasizes learning mathematical concepts and skills through inquiry or open-ended questions
In <i>Math in Focus</i>	<p>ENGAGE-LEARN-TRY focus cycles</p> <ul style="list-style-type: none"> • ENGAGE gives content-domain specific tasks that help students learn concepts and skills through mental reasoning or manipulation of concrete representations. This process allows students to think about the concepts they will learn. • In LEARN, students construct new knowledge collaboratively, supported by questioning techniques suggested in the Teacher Edition. • In TRY, students practice newly acquired knowledge with guidance from the teacher. 	<p>PUT ON YOUR THINKING CAP!</p> <p>These non-routine problems develop students' higher-ordering thinking skills and heuristic strategies.</p> <p>The four-step problem-solving model⁶ makes students' thinking processes visible.</p>	<p>THINK</p> <p>These problems stimulate students' thinking, cause them to search for and connect information to uncover new ideas, and explore solutions through thinking critically and creatively. [This is sometimes called the "productive struggle."] Problems will require students to use critical thinking skills, heuristics, and mathematical language to solve them.</p>



With Classroom Posters for each grade level, students have reinforcement for the tools and processes to become the curious, enthusiastic mathematicians they were meant to be.

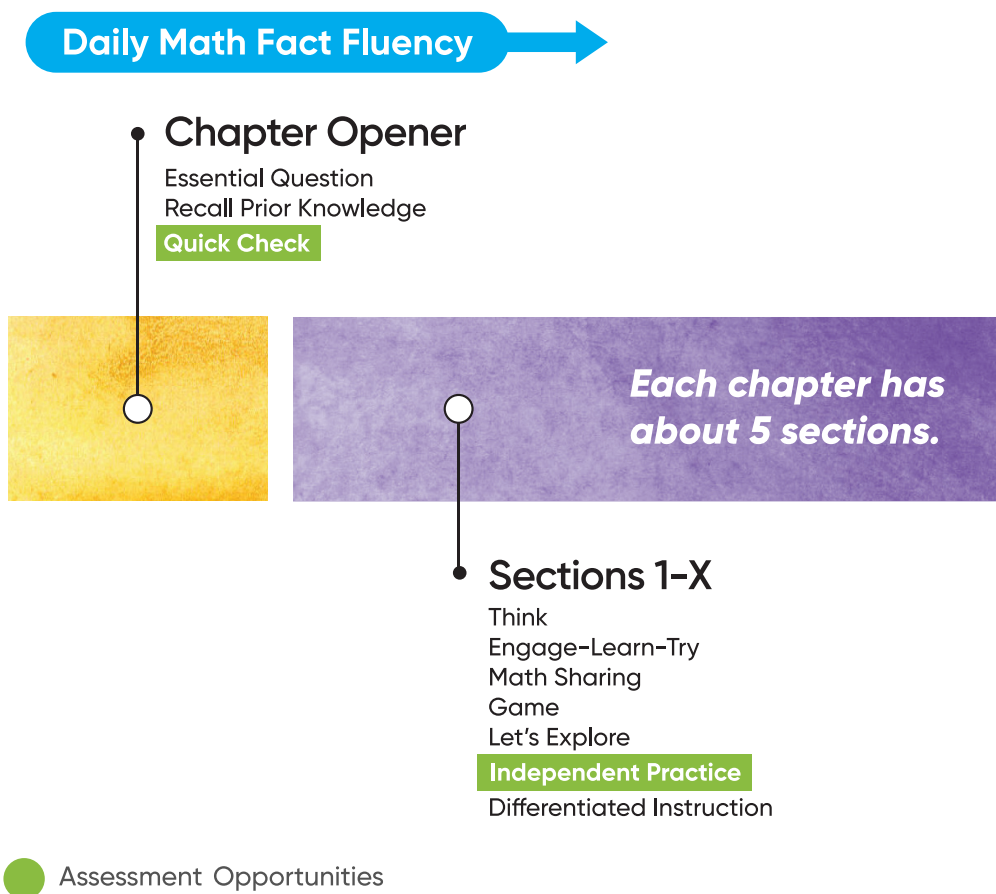
Cultivate Math Enthusiasts with a Proven Instructional Design

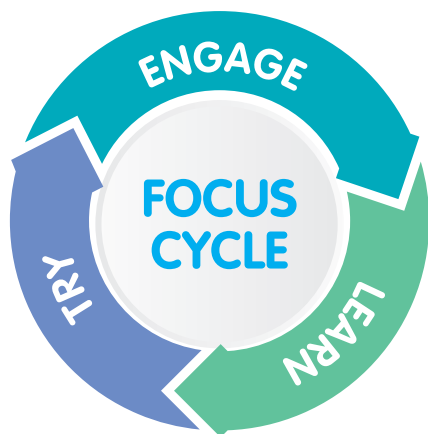
Each section of *Math in Focus* is structured to maximize understanding and promote deeper thinking.

Students begin every chapter with an **Essential Question** connected to the chapter's learning objectives. Here, students begin to understand why they're learning these concepts.

Think problems encourage students to approach a challenging situation with multiple strategies and discuss their reasoning.

Because fluency is an essential aspect of mathematical learning, students engage with **Fact Fluency** activities in every chapter, designed to help them develop conceptual understanding and procedural skills.

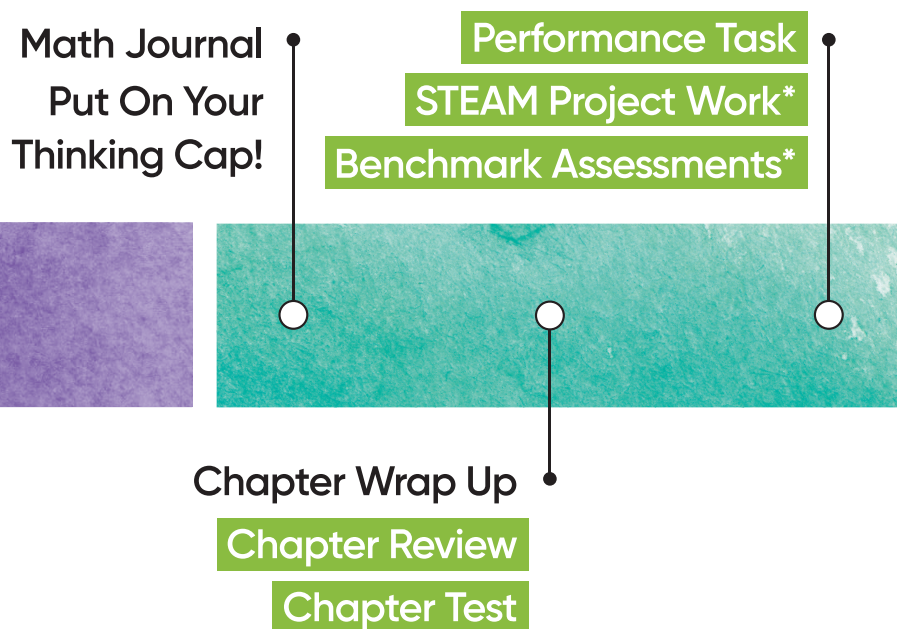




Each *Math in Focus* section includes one or more **ENGAGE-LEARN-TRY** focus cycles to stimulate and synthesize learning. In this cycle, students make their way through a concept step by step, paying close attention to different aspects to build a strong foundation.

After engaging, learning, and practicing, students complete extended-response assessments in the **Put On Your Think Cap!** problems and **Performance Tasks**.

To ground their learning in real-world problems, students engage in **STEAM Project Work**. This collaborative task promotes critical and creative thinking in Science, Technology, Engineering, Arts, and Mathematics.



*Occurs when applicable

Note: In Grade K, some features are modified or replaced with developmentally appropriate tasks.

Achieve More with Student-Driven Strategies


The instructional strategies in *Math in Focus* were developed based on global research and best practices to build critical thinkers from an early age. At the center of Singapore Math® pedagogy is the consistent application of mathematical models and strategies across each grade level. As students engage with these models and work toward mastery, educators benefit from point-of-use professional support, so students and teachers alike can learn, grow, and achieve more.

Develop a Solid Foundation

The **Concrete-Pictorial-Abstract** approach allows students to gain deeper conceptual understanding.

- In the **Concrete** stage, students use hands-on manipulatives to explore new concepts.

Example:



Standard form: 11,221
Word form: eleven thousand, two hundred twenty-one

- In the **Pictorial** stage, students see these mathematical ideas represented by diagrams. They learn that models are strategic representations to understand quantities and relationships between numbers.

Example:

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
4	0	5	7	8	6
3	6	5	8	9	7

- Students connect their concrete experiences and pictorial representations to **Abstract** symbols, such as numbers.

Example:

Diego's pattern starts from 1 and uses the rule "add 12."

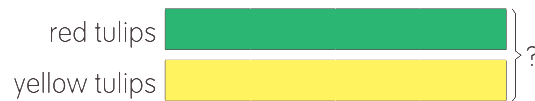
1 13 25 37 49 61 73 85

Strengthen Problem-Solving Skills with Mathematical Models

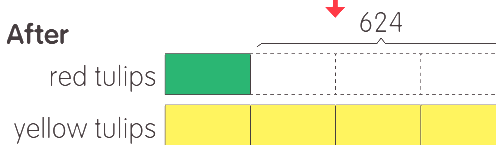
The most recognizable Singapore Math® model is the **bar model**. This model helps students visualize the quantities in a problem, understand the relationships between the quantities, and identify unknowns. Students use bar models to explore and grasp the “why” and “how” of problem solving. The bar model is fundamentally flexible in its application and provides a strong foundation for algebraic reasoning and thinking.

A florist had an equal number of red and yellow tulips. Then, she had 4 times as many yellow tulips as red tulips. How many tulips did the florist have at first?

Before

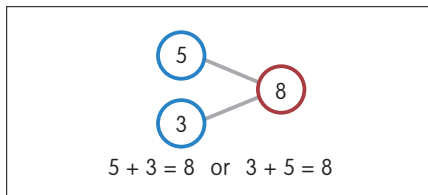


After

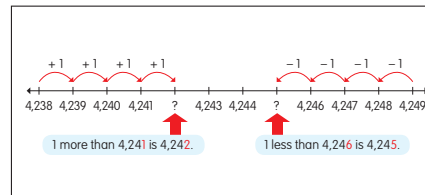


Powerful **visual models** are a hallmark of the Singapore Math® approach. These models are used consistently across grade levels to build and extend conceptual understanding.

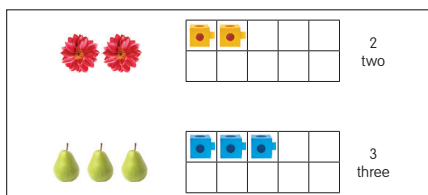
Number bonds



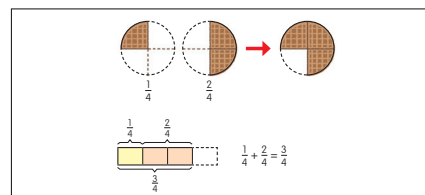
Number lines



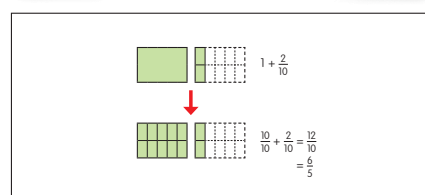
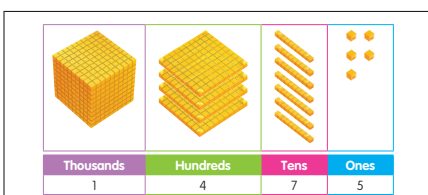
Ten frames



Fraction models



Place-value charts



Streamline Instruction

Ed, the HMH learning platform, combines authentic Singapore Math® pedagogy with data-driven instruction, digital assessments, and on-demand professional learning, all on one seamless and streamlined system.

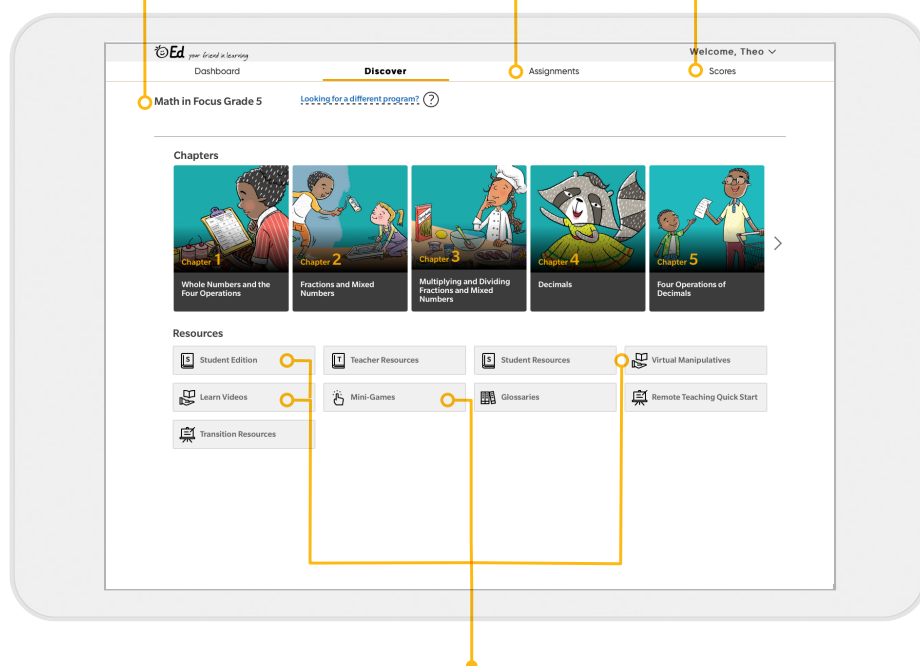
Support for Learning

Ed's design provides an easy and engaging interface for students.

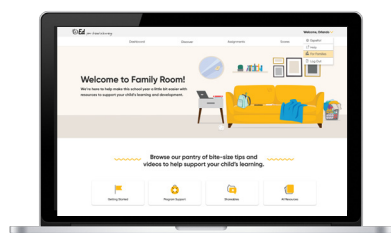
From the **Dashboard** tab, students can see an overview of upcoming or overdue assignments, log in to a virtual classroom session, or easily launch any supplemental HMH solutions that they may have access to.

From the **Assignments** tab, students can easily complete and keep track of upcoming assessments.

From the **Scores** tab, students can immediately review their scores on assessments and track their own progress.



From the **Discover** tab, students have access to their Student eBook and can explore additional, digital-only, interactive and supportive resources.



Family Room supports new learning environments and makes at-home learning more manageable for families and caregivers by providing easily accessible and equitable, on-demand resources to help support students.

Support for Teaching

With *Ed*, teachers can easily plan lessons, administer assignments and assessments, and group students to provide targeted and specific differentiation. *Ed*'s reporting tools give teachers the necessary data to monitor growth and guide students to aligned resources for support, enrichment, and mastery.

Math in Focus:

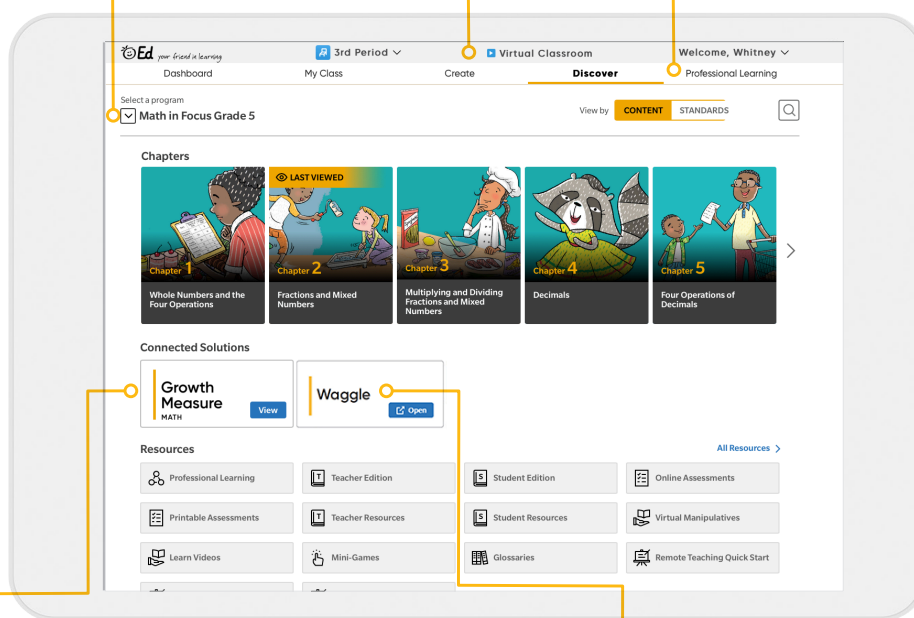
Access to *Math in Focus* course materials, including eBooks and Teacher and Transition Resources.

Virtual Classroom:

One-click access to teach virtually. Perfect for whole class, 1:1 instruction, and video chats.

Professional Learning:

On-demand *Math in Focus* resources and live remote sessions through Teacher's Corner.



Growth Measure:

HMH Growth Measure provides teachers with an accurate benchmark of students' knowledge.

Waggle:

For schools that have purchased Waggle®, Growth Measure results feed directly into Waggle, an adaptive supplemental instruction and practice solution for math.

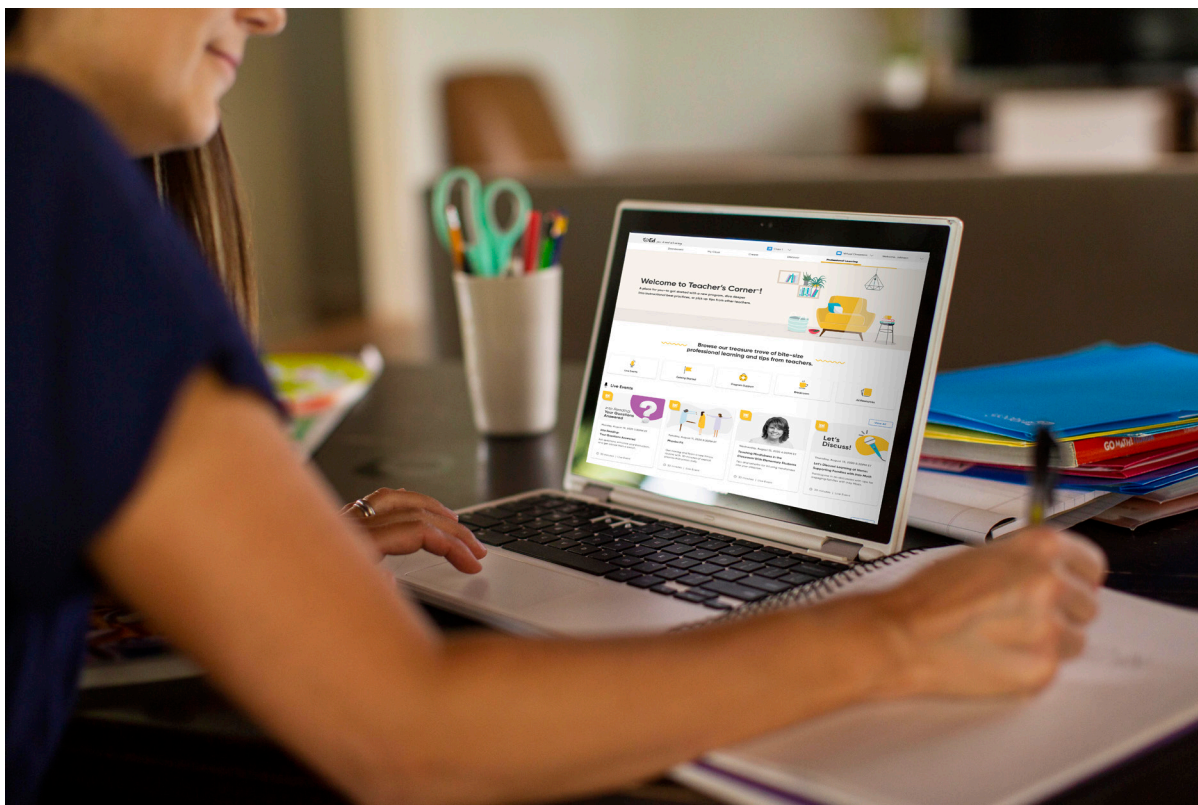


HMH Go is a free learning app that connects students and teachers to *Math in Focus* content and instructional resources online, offline, or on the go. Students and teachers can download content to work on in class or at home, regardless of their connectivity limitations.

Support Every Step of the Way

Introducing Teacher's Corner

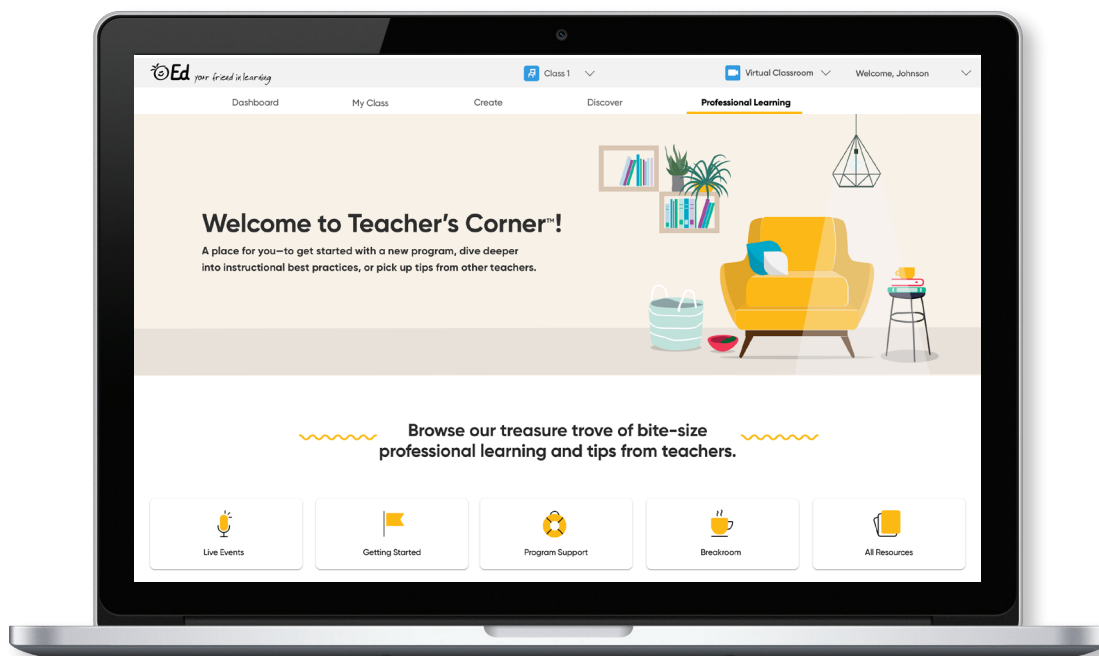
Getting help or refining your practices isn't limited to scheduled trainings or coaching. With Teacher's Corner, you have access to on-demand professional learning and teaching support via Ed, the HMH learning platform, anytime, anywhere.



Welcome to Teacher's Corner. A Place Just for You.

We want you to feel confident teaching with *Math in Focus*—and that comes with ongoing support. Teacher's Corner gives you the support you want with an ever-growing library of professional learning resources from Getting Started training to tips from other teachers and our team of experienced coaches.

So whether you want to quickly prep for a lesson or invest time in your professional growth, we have trusted resources to enhance your instruction and classroom tomorrow.



On Demand, But Not One-Size-Fits-All

Teachers have the choice of bite-size professional learning resources designed to be easily applicable to tomorrow's instruction. We empower teachers with the information they need to choose what's right for them and offer a variety of media types, duration time, and authors.

Curated, Trusted Content

There's no shortage of free resources online, but with Teacher's Corner, professional learning and instructional recommendations align to research-based practices. Hear from prominent thought leaders, experienced coaches and former teachers, and practicing teachers.

Relevant and Ready for Tomorrow's Instruction

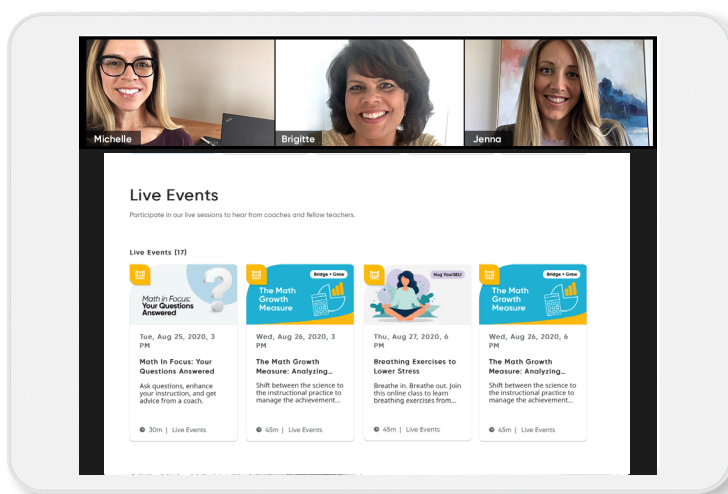


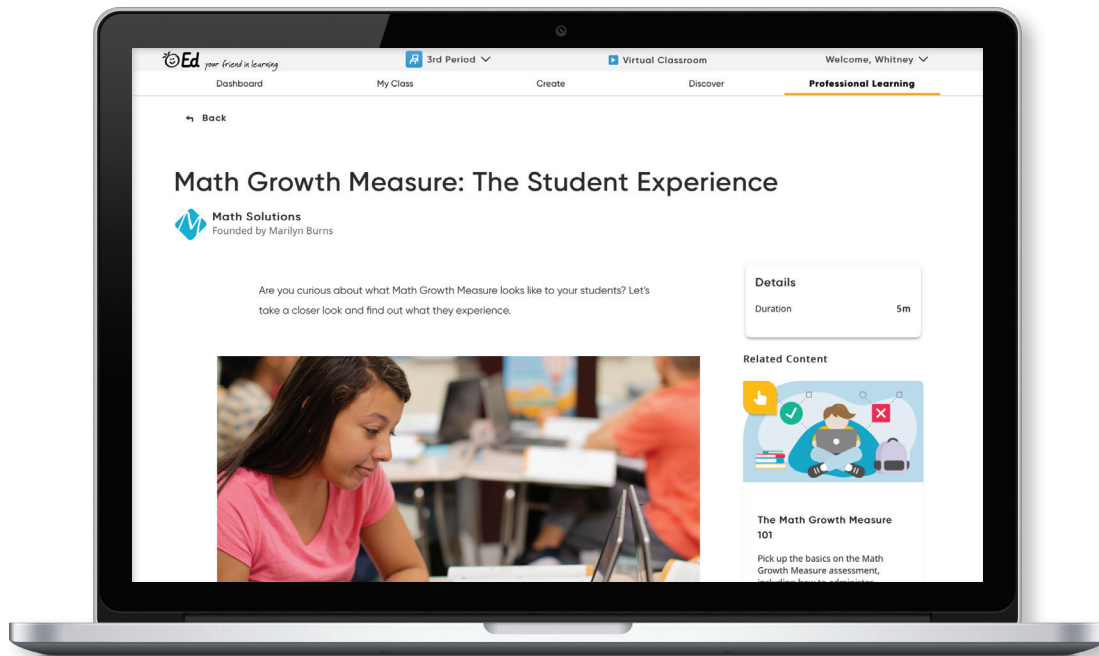
Maximize Teacher Time

In the past professional development has been a long time commitment for teachers. Our new virtual model offers a Getting Started training to get up to speed on the basics and ongoing opportunities to build teacher confidence with *Math in Focus* and instructional best practices. We respect teacher's time with on-demand, bite-size content, available at point of use and in our library.

Live Community Support

Whether teachers have a question or want implementation advice, our Live Events offer opportunities to connect with HMH coaches and each other. Teachers can register for online sessions that feature everything from groundbreaking new author research to group discussions facilitated by other teachers.





Extend Your Professional Learning

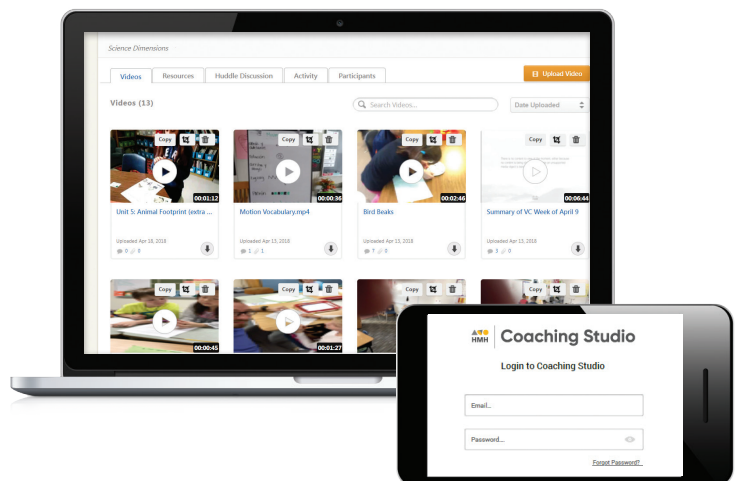
Whether you are interested in deepening your content knowledge at each grade level, or closing the achievement gap, **Math Solutions®** can provide the support you need to grow your practice with online coaching, courses, and professional learning communities.

Coaching Studio

The award-winning **HMH Coaching Studio** platform allows you to stay connected with your coach and your colleagues, share and upload resources, and access a library of on-demand lesson-modeling videos.



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Math in Focus[®]

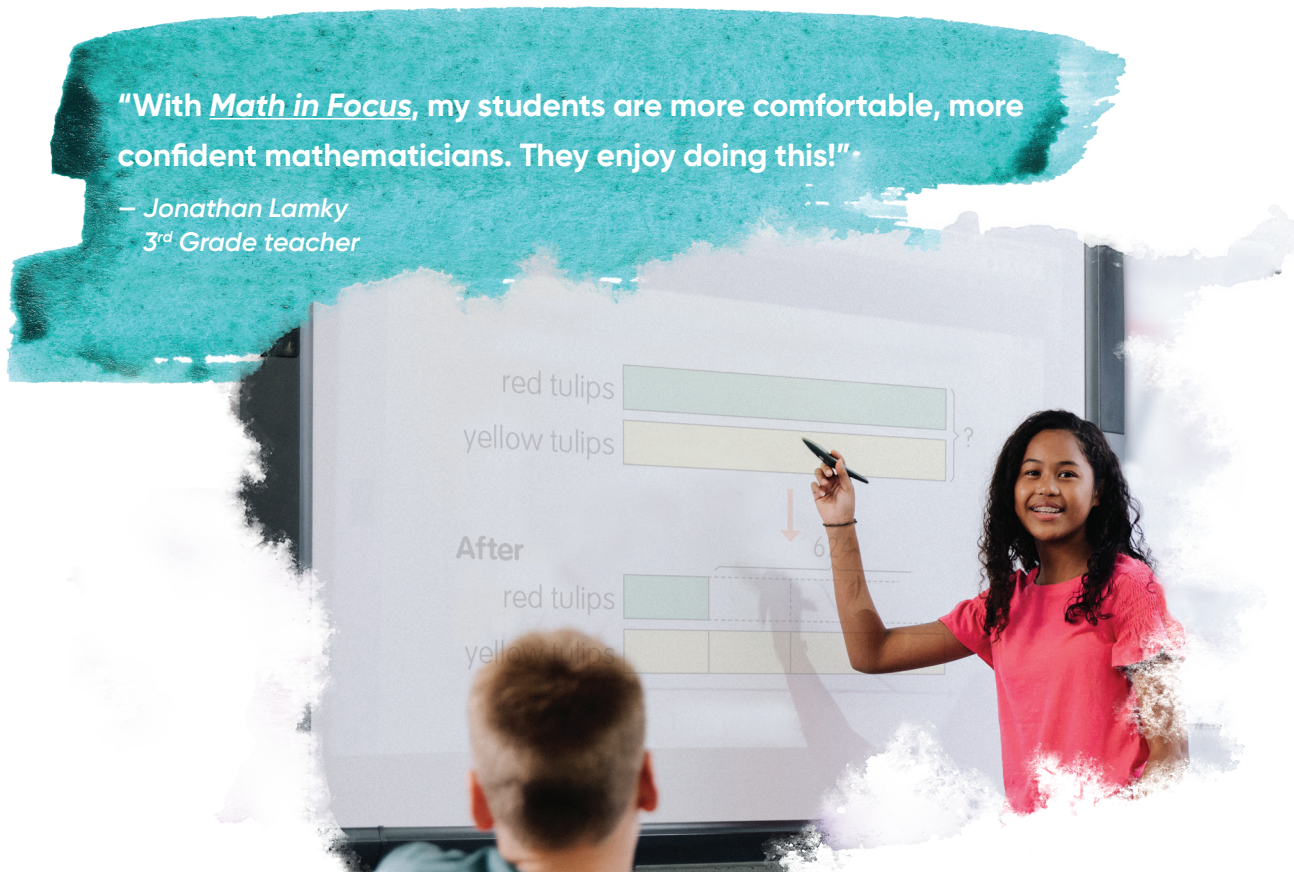
Singapore Math[®] by Marshall Cavendish[®]

With a pedagogy that's proven to raise achievement, powerful data and assessments, and enhanced professional learning, *Math in Focus* represents the most comprehensive, research-driven program of its kind.

New and improved, the 2020 edition builds strong foundations of learning, raises instructional practice in the classroom, and helps cultivate the next generation of brilliant problem solvers.

"With *Math in Focus*, my students are more comfortable, more confident mathematicians. They enjoy doing this!"

— Jonathan Lamky
3rd Grade teacher



To learn more about *Math in Focus* or preview the digital experience, please visit hmhco.com/mathinfocus or contact your HMH Account Executive.

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